

CLAIMS

What is claimed is:

1. A system, comprising:
a data store configured to store a building block from which a restore distribution can be built, and a build information concerning the building block; and
a build logic operably connectable to the data store, the build logic being configured to selectively read the build information and, in response to analyzing the build information, to selectively read a building block, and to create the restore distribution from one or more building blocks based, at least in part, on the build information, where the restore distribution is configured to automatically produce a software image on a target platform and the restore distribution includes computer executable instructions for producing the software image from the restore distribution.
2. The system of claim 1, including a media creator configured to store the restore distribution on a computer-readable medium, and where the build logic is further configured to control the media creator to store the restore distribution on the computer-readable medium.
3. The system of claim 1, where a building block comprises one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database.
4. The system of claim 1, where the build information includes one or more of, a rule, a heuristic, a program, a build list, a build definition, a dependency, and an executable.
5. The system of claim 2, the media creator being configured to store the restore distribution on one or more of, a compact disc (CD), a digital versatile disk (DVD), a tape, a floppy disk, a Zip disk, an application specific integrated circuit, a memory stick, a memory, and a USB token.

6. The system of claim 2, where the media creator comprises a CD burner.
7. The system of claim 1, where the restore distribution includes a content element derived from a building block, where deriving the content element from the building block includes one or more of, copying, compiling, interpreting, assembling, and translating the building block.
8. The system of claim 7, where the content element comprises one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database.
9. The system of claim 8, where the restore distribution includes one or more of, a rule for combining one or more content elements, a program for installing one or more content elements, a program for combining one or more content elements, and computer executable instructions configured to analyze the target platform on which the software image will be built from the restore distribution.
10. The system of claim 1, where the build logic is further configured to store, in the data store, information concerning one or more of, a restore distribution build, and a software image build.
11. A system, comprising:
 - a software data store configured to store a building block that may be included in a restore distribution;
 - an attribute data store configured to store an attribute related to a building block stored in the software data store;
 - a rules data store configured to store a rule that facilitates controlling one or more of, including a building block in a restore distribution, processing a building block at restore distribution build time, and processing a building block at restore time;
 - a constraint data store configured to store a constraint that facilitates establishing a scope of the restore distribution; and

a build logic configured to read one or more building blocks from the software data store, to read one or more attributes from the attribute data store, to read one or more rules from the rules data store, to read one or more constraints from the constraint data store, and to build a restore distribution that includes one or more of, a building block, and a rule, where the build logic may be controlled, at least in part, by a rule and a constraint,

where the restore distribution also includes computer executable instructions related to producing, from the restore distribution, a software image on a target platform.

12. The system of claim 11, including a media creator configured to store the restore distribution on a computer-readable medium.

13. The system of claim 11, where a building block comprises one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database.

14. The system of claim 11, where an attribute is configured to store information concerning one or more of, an operating system associated with a building block, an operating system version associated with a building block, a spoken language associated with a building block, a computer language associated with a building block, a geographic region in which a building block may function, a device identifier for a device with which a building block may function, a release data associated with a building block, an architecture with which a building block may function, a build list, an interaction between two or more building blocks, a desired interaction between two or more building blocks, and a dependency between two or more building blocks.

15. The system of claim 11, where a rule describes one or more of, how a building block is to be selected for inclusion in a restore distribution, how to combine two or more building blocks, how to connect two or more building blocks, when a building block is to be processed at restore distribution build time, how a building block is to be processed at restore distribution build time, when a building block is to be processed at restore time, and how a building block is to be processed at restore time.

16. The system of claim 11, where a constraint describes one or more of, how to limit a scope of a restore distribution, and when to exclude a building block from a restore distribution.
17. The system of claim 11, the media creator being configured to store the restore distribution on one or more of, a compact disc (CD), a digital versatile disk (DVD), a tape, a floppy disk, a Zip disk, an application specific integrated circuit, a memory stick, a memory, and a Universal Serial Bus (USB) token.
18. The system of claim 11, where the media creator comprises a CD burner.
19. The system of claim 11, the media creator being configured to send a signal to the build logic that storing a restore distribution on a computer-readable medium has completed.
20. The system of claim 19, including a tracking data store, and where the build logic is configured to store in the tracking data store, upon receiving the signal, a status data concerning the restore distribution.
21. A method, comprising:
 - acquiring a building block that may be included in a restore distribution;
 - acquiring an attribute concerning the building block, and relating the attribute to the building block;
 - acquiring a rule concerning one or more of, when to include a building block in a restore distribution, how to process a building block at restore distribution build time, and how to process a building block at restore time;
 - acquiring a constraint concerning one or more of, how to limit a scope of a restore distribution, and when to exclude a building block from a restore distribution; and
 - building a restore distribution superset from one or more of, the building block, the attribute, the rule, and the constraint, where a restore distribution can be built from a subset of the elements of the restore distribution superset.
22. The method of claim 21, including storing the building block in a building block data store.

23. The method of claim 22, including storing the attribute in an attribute data store.
24. The method of claim 23, including storing the rule in a rules data store.
25. The method of claim 24, including storing the constraint in a constraint data store.
26. The method of claim 25, where the restore distribution superset is stored in a database.
27. The method of claim 21, where a building block comprises one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database.
28. The method of claim 21, where an attribute is configured to store information concerning one or more of, an operating system associated with a building block, an operating system version associated with a building block, a spoken language associated with a building block, a computer language associated with a building block, a geographic region in which a building block may function, a device identifier for a device with which a building block may function, a release data associated with a building block, an architecture with which a building block may function, a build list, an interaction between two or more building blocks, a desired interaction between two or more building blocks, and a dependency between two or more building blocks.
29. The method of claim 21, where a rule describes one or more of, how a building block is to be selected for inclusion in a restore distribution, how to combine two or more building blocks, how to connect two or more building blocks, when building blocks are to be processed at restore distribution build time, how building blocks are to be processed at restore distribution build time, when building blocks are to be processed at restore time, and how building blocks are to be processed at restore time.

30. The method of claim 21, where a constraint describes one or more of, how to limit the scope of a restore distribution, and when to exclude a building block from a restore distribution.

31. A computer-readable medium storing computer executable instructions operable to perform a method, the method comprising:

- acquiring a building block that may be included in a restore distribution and storing the building block in a building block data store, the building block comprising one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database;

- acquiring an attribute concerning the building block, relating the attribute to the building block, and storing the attribute in an attribute data store;

- acquiring a rule concerning one or more of, when to include a building block in a restore distribution, how to process a building block at restore distribution build time, and how to process a building block at restore time, and storing the rule in a rules data store;

- acquiring a constraint concerning one or more of, how to limit a scope of a restore distribution, and when to exclude a building block from a restore distribution, and storing the constraint in a constraint data store; and

- building a restore distribution superset from one or more of, the building block, the attribute, the rule, and the constraint, where a restore distribution can be built from a subset of the elements of the restore distribution superset, and where the restore distribution superset is stored in a database.

32. A method, comprising:

- accessing a superset of restore distribution elements;

- determining a desired coverage for a restore distribution to be built from one or more restore distribution elements;

- selectively reading, from the superset, a building block, where the reading is controlled, at least in part, by the desired coverage;

- reading, from the superset, an attribute concerning the building block;

reading, from the superset, a rule concerning one or more of, how to process the building block into the restore distribution, and how to process the building block at restore time;

acquiring a constraint concerning how the building block is to be limited in a software image built on a target platform from the restore distribution;

building a restore distribution comprising one or more building blocks and one or more computer executable instructions, where the software image can be built on the target platform from the restore distribution; and

controlling a media creator to store the restore distribution on a computer-readable medium.

33. The method of claim 32, where a building block comprises one or more of, a file, a program, an application, an object, a dynamic link library, a data structure definition, a data structure, a file system definition, a file system, an applet, a servlet, a subroutine, a database record, and a database.

34. The method of claim 32, where an attribute is configured to store information concerning one or more of, an operating system associated with a building block, an operating system version associated with a building block, a spoken language associated with a building block, a computer language associated with a building block, a geographic region in which a building block may function, a device identifier for a device with which a building block may function, a release data associated with a building block, an architecture with which a building block may function, a build list, an interaction between two or more building blocks, a desired interaction between two or more building blocks, and a dependency between two or more building blocks.

35. The method of claim 32, where a rule describes one or more of, how a building block is to be selected for inclusion in a restore distribution, how to combine two or more building blocks, how to connect two or more building blocks, when a building block is to be processed at restore distribution build time, how a building block is to be processed at restore distribution build time, when a building block is to be processed at restore time, and how a building block is to be processed at restore time.

36. The method of claim 32, where a constraint describes one or more of, how to limit the scope of a restore distribution, and when to exclude a building block from a restore distribution.

37. The method of claim 32, where the superset is stored in a database.

38. The method of claim 32, including receiving, from the computer-readable media creator, a tracking data concerning storing the restore distribution on the computer-readable medium, and storing the tracking data.

39. A system, comprising:

means for acquiring a restore distribution content and computer executable instructions for manipulating the restore distribution content, where a restore distribution can be built from the restore distribution content by executing the instructions;

means for building the restore distribution from the restore distribution content by executing the instructions; and

means for storing the restore distribution on a computer-readable medium.

40. In a computer system having a graphical user interface comprising a display and a selection device, a method of providing and selecting from a set of data entries on the display, the method comprising:

retrieving a set of data entries, where a data entry represents a restore distribution build operation;

displaying the set of data entries on the display;

receiving a data entry selection signal indicative of the selection device selecting a selected data entry; and

in response to the data entry selection signal, initiating a restore distribution build operation associated with the selected data entry.

41. A computer-readable medium having stored thereon a data structure comprising:

a first field containing a building block that may be included in a restore distribution;

a second field containing attribute data concerning the building block;

and

a third field containing a rule concerning whether to include the building block in the restore distribution, how to process the building block into the restore distribution, and how to process the building block out of the restore distribution into a software image.

42. A set of application programming interfaces embodied on a computer-readable medium for execution by a logic in conjunction with building a restore distribution, comprising:

a first interface for communicating a building block that may be included in the restore distribution;

a second interface for communicating an attribute data concerning the building block;
and

a third interface for communicating a rule concerning one or more of, how to process a building block into a restore distribution, and how to process a building block out of a restore distribution into a software image on a target platform.